

POLICY DIRECTION

Official Community Plan:

- Retain and conserve as much natural vegetation, rock outcrops, existing hydrology, and unique site features as possible, including Garry Oaks, other large trees, and significant vegetation.
- Respect the existing topography, minimizing the need for cut and fill, major blasting, or tall retaining walls.

Restrict the volume
of rock removed on
a property,
distinguishing small
distinguishing sperties
versus large properties

Require an arborist report

Require a wildlife survey for blasting between Mar 15 – Aug 15 (Wildlife Act)



Require pre- and postblast topographic surveys to confirm rock volume.



ROCK BLASTING & BREAKING

- Blasting is the the use of explosives, or chemicals, for the purpose of moving, displacing or breaking rock or other material
- Rock-breaking is the removal of boulders or bedrock from land by drilling, percussive breaking (not hammering), or splitting, but excluding blasting
- A blaster is a person who is the holder of a valid, applicable Blaster's Certificate issued by a recognized regulator. In BC, WorkSafeBC certifies blasters and regulates blasting activities

Require a detailed blasting plan, including a pre-blast survey of a pre-blast survey of all nearby structures all nearby structures with additional fees for changes

Include a blastingspecific fee schedule
in the bylaw that
considers the volume
of rock removed,
permit extensions, §
security deposits

Increase liability
insurance
requirements
Tie release of security to
acceptance of post-blast
topographic survey



NOISE & IMPACT

- Low frequency noise (mechanical rock hammering) is more disturbing to the human ear than high frequency noise (rock blasting)
- Damage depends on several circumstances, such as environmental conditions and other construction activity, but was roughly modeled by the former US Bureau of Mines (USBM) demonstrating higher frequency efforts resulted in less damage than lower frequency

Restrict blasting times to Public Works operating hours:

operating hours:

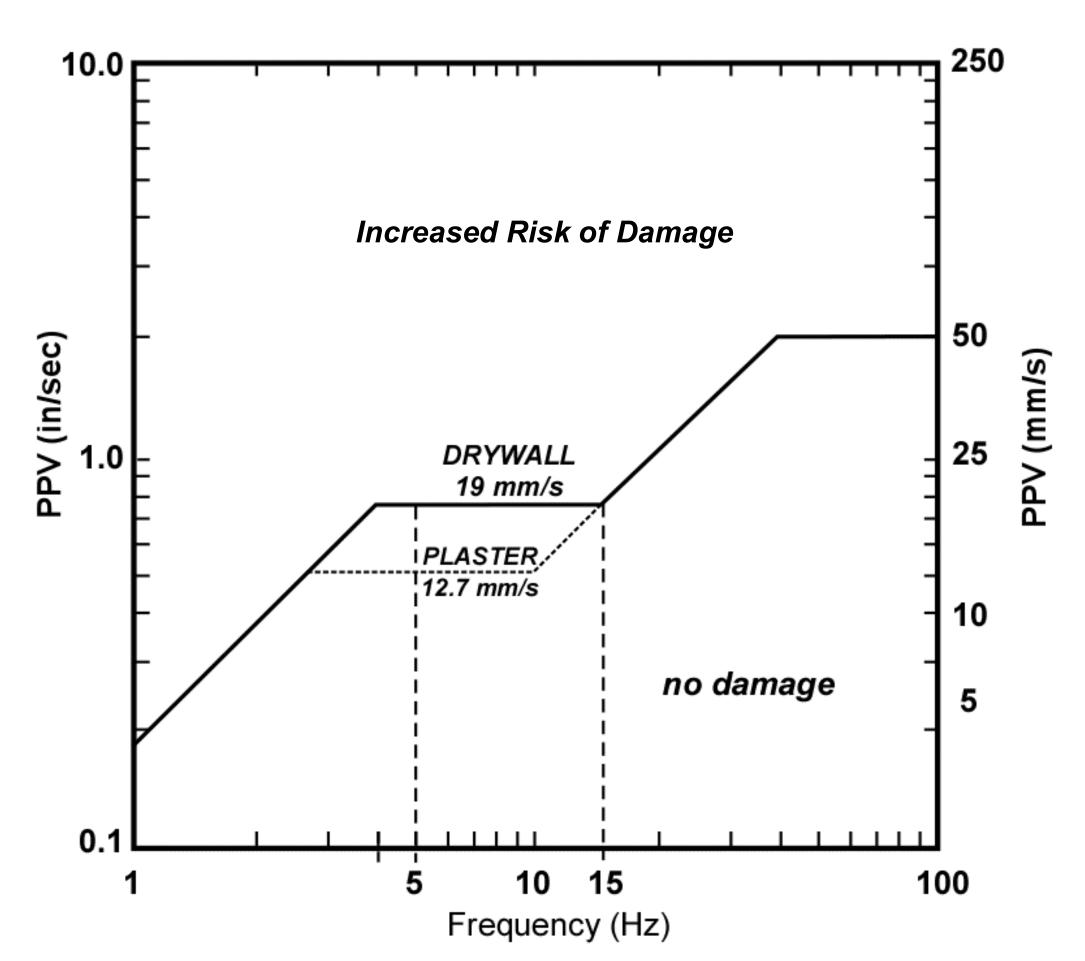
8 am-4 pm M-F except

8 atutory holidays

• Statutory holidays • Dec 24-jan 2 • Nesting Season

No onsite rock crushing or hoerammina

Maximum one blasting permit per year per property



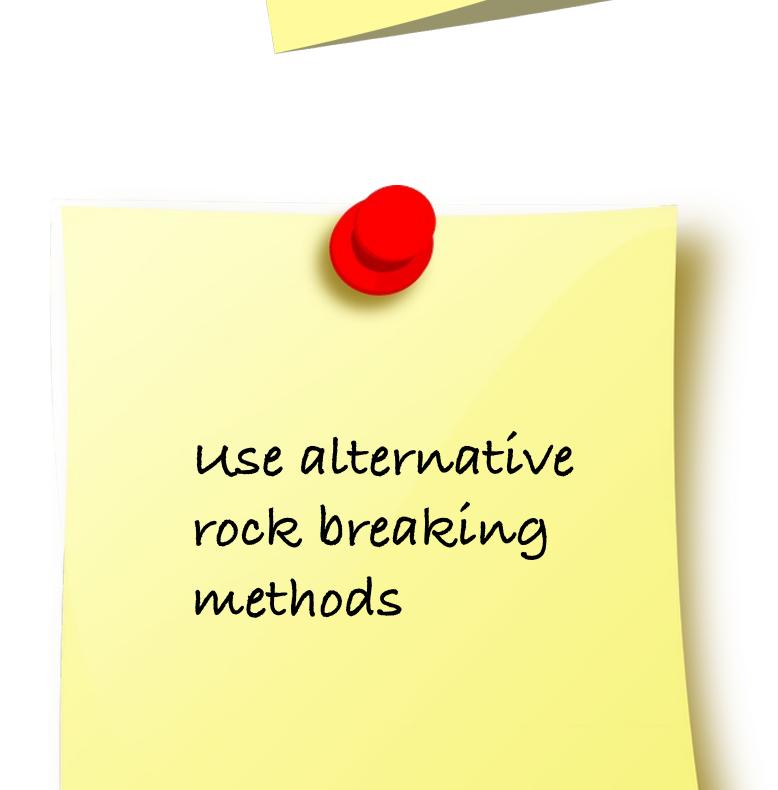
USBM BLASTING STANDARD: FREQUENCY VERSUS PEAK PARTICLE VELOCITY SOURCE: SEEWEST, BEST PRACTICES GUIDE FOR CLOSE PROXIMITY BLASTING OPERATIONS, 2023

Limit rock breaking
to 10-15 working days:
Extension subject to
Extension subject to
extension subject to
additional fees



HOE RAMMING

- Hoe ramming is a mechanical technique of breaking rock by pounding the rock using a heavy-duty pneumatic hammer installed on an articulated arm of a machine, which produces a persistent and low frequency noise
- Provides more precise rockbreaking in sensitive areas, like protection of tree roots and adjacent structures
- Other alternative rock breaking methods include hydraulic splitting, expanding grout, and the use of chemical agents



Prohibit hoe ramming







COMMUNICATION

Context:

- Quality of life is improved with minimized impacts and increased knowledge about potential impacts
- Neighbours should be aware of potential impacts in advance of any disturbance
- Good communication includes accessible information
- Blasters are regulated by WorkSafeBC to provide a minimum standard of notice to affected property owners about planned blasting operations

District of Oak Bay

District of Oak Bay

Staff supplements

required notifications

required notifications

with letters to affected

with letters to affected

where one week prior

owners one week prior

to planned blasting

Require that rock removal areas be clearly marked on site, including depth and volume of rock to be removed

